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ABSTRACT

This invention provides a process for producing a 5-hydroxy-3-oxopentanoic acid, a useful pharmaceutical intermediate, easily from a readily available, inexpensive starting material without using any extraordinary production equipment such as a very-low-temperature reactor.

Thus, this invention provides a process for producing a 5-hydroxy-3-oxopentanoic acid

which comprises permitting a lithium amide to act upon a mixture of an acetic acid ester and a 3-hydroxypropionic acid derivative at not below -20°C .

Further, this invention also provides a process for producing a 5-hydroxy-3-oxopentanoic acid

which comprises treating a mixture of an acetic acid ester and a 3-hydroxypropionic acid derivative with a Grignard reagent to prepare a mixture of a compound and an acetic acid ester of the above formula (I),

and permitting a lithium amide to act upon the mixture at a temperature not below -20°C .

(54) **PROCESSES FOR THE PREPARATION OF
5-HYDROXY-3-OXOPENTANOIC ACID
DERIVATIVES**

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(56) **References Cited
PUBLICATIONS**

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(57) **ABSTRACT**

This invention provides a process for producing a
5-hydroxy-3-oxopentanoic acid, a useful pharmaceutical
intermediate, easily from a readily available, inexpensive
starting material without using any extraordinary production
equipment such as a very-low-temperature reactor.

Thus, this invention provides a process for producing a
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which comprises permitting a lithium amide to act upon
a mixture of an acetic acid ester and a
3-hydroxypropionic acid derivative at not below -20°
C.

Further, this invention also provides a process for producing
a 5-hydroxy-3-oxopentanoic acid

which comprises treating a mixture of an acetic acid ester
and a 3-hydroxypropionic acid derivative with a Grig-
nard reagent to prepare a mixture of a compound and an
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20 Claims, No Drawings